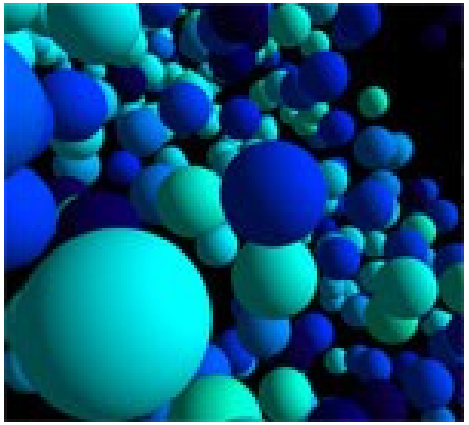
ISO TC 229 Nanotechnologies



- Inaugural meeting, November 20
- Secretariat: United Kingdom, British Standards Institution (BSI)
- Secretary: Mr. Jose Alcorta
- Chair: Dr. Peter Hatto

ISO TC 229 Nanotechnologies

- Participating countries: 27

Australia (SA)
Belgium (IBN)
Brazil (ABNT)
Canada (SCC)
China (SAC)
Czech Republic (CNI)
Denmark (DS)
Finland (SFS)
France (AFNOR)
Germany (DIN)
India (BIS)
Iran, Islamic Republic of (ISIRI)
Israel (SII)
Italy (UNI)
Japan (JISC)
Korea, Republic of (KATS)
Malaysia (DSM)
Netherlands (NEN)
Poland (PKN)
Russian Federation (GOST R
Singapore (SPRING SG)
Spain (AENOR)
Sweden (SIS)
Switzerland (SNV)
Thailand (TISI)
USA (ANSI)

ISO TC 229 Nanotechnologies

- Observer countries: 8

  Argentina (IRAM)
  Egypt (EOS)
  Estonia (EVS)
  Hong Kong, China (ITCHKSAR)
  Morocco (SNIMA)
  Slovakia (SUTN)
  South Africa (SABS)
  Venezuela (FONDONORMA)

USA (American National Standards Institute) and U.S. Technical Advisory Group (TAG)

ANSI American National Standards Institute

- ANSI is the official representative of the U.S. to the ISO TC 229 Nanotechn

ISO International Organization for Standardization

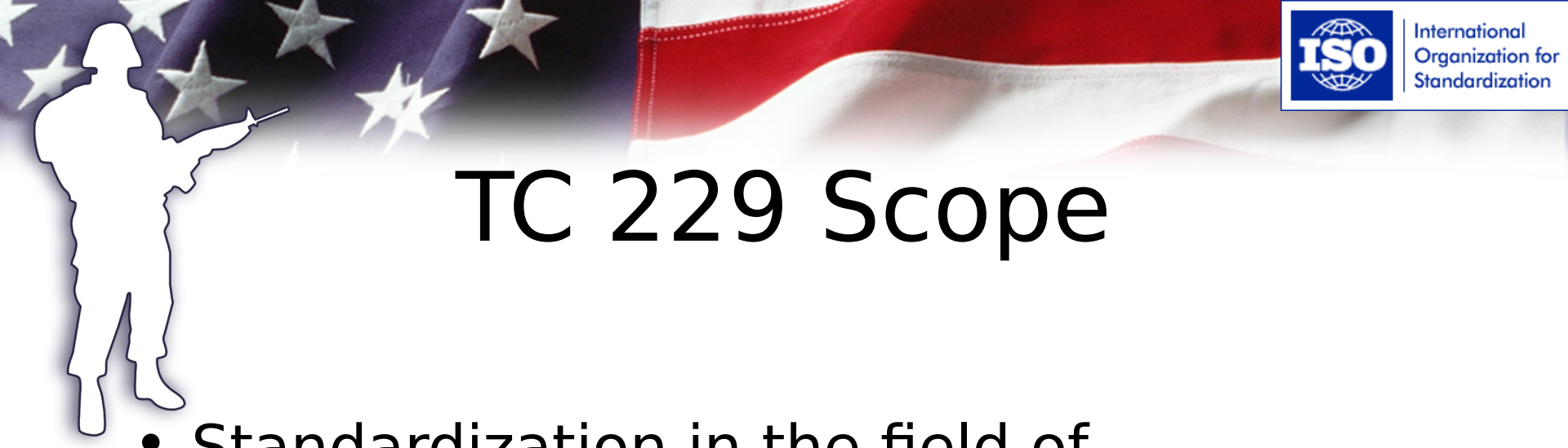
- ANSI, administrator and secretariat to the U.S. TAG between the U.S. standards activities and the ISO

USA (ANSI) and U.S. Technical Advisory Group (TAG)

- Chair, U.S. Technical Advisory Group (TAG) to TC229

Clayton Teague, Director of the National Nanotechnology Coordination Office

- U.S. TAG – about 50 members (industry, academia, government)



TC 229 Scope

- Standardization in the field of nanotechnologies
- Specific tasks:
  - classification
  - terminology and nomenclature
  - basic metrology
  - characterization
  - includes calibration and certification
  - risk and environmental issues

TC 229 Scope

- The methods of test are to include methods for determining
  - physical,
  - chemical,
  - structural and
  - biological properties

of materials or devices for which the performance, in the chosen application, is critically dependent on one or more dimension of <100nm.

Test methods for applications, and product standards shall come within the scope of the TC.

TC 229 Working Groups

- **TC 229/WG 1 Terminology and nomenclature**
  - Convenor: Canada (Standards Council of Canada, SCC)

- **TC 229/WG 2 Measurement and characterization**
  - Convenor: Japan (Japanese Industrial Standards Committee, JISC)
- **TC 229/WG 3 Health, Safety and Environmental Aspects of Nanotechnologies**
  - Convenor: USA (American National Standards Institute); Chair: Mr. Steven Brown, Intel

U.S. TAG Working Group Structure Mirrors TC229 Working Groups

- **TC 229/WG 1 Terminology and nomenclature**
- **TC 229/WG 2 Measurement and characterization**
- **TC 229/WG 3 Health, Safety and Environmental Aspects of Nanotechnologies**

What ISO Standards Should be Developed?

- U.S. Survey (ended May 2006) sent out within the U.S. to gather information so that the ANSI-accredited TAG could recommend standards
- There is no sense in developing standards that industry does not need or will not use

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Nanotechnology Research and Advisory Firm

Key Questions of U.S. Survey

- Negative impact on organizations because of lack of standards

- Prioritization of the types of standards needed

Goal of Standards

- To aid commerce
- Improve communication in R&D community
- Address health, safety, and environmental issues

When will ISO Publish?

- Technical Reports or public specifications
  - 2007?
- Standards
  - 2009?

Questions?